MEDICAL CONTROL GUIDELINE: PRE-EXISTING VASCULAR ACCESS DEVICES

PRINCIPLES:

- 1. Peripherally or centrally inserted vascular access devices provide access to the central circulation through a catheter inserted beneath the skin, allowing rapid, pain-free administration of medication and intravenous fluid.
- 2. EMS personnel should consider other routes of medication administration such as intramuscular (IM), intraosseous (IO), or intranasal (IN) before using pre-existing vascular access devices.
- 3. EMS personnel may utilize these devices when unable to obtain intravenous or intraosseous access at other sites for all age patients in cardiopulmonary arrest or extremis.
- 4. Access of these devices for all ages requires base hospital order for patients not in cardiopulmonary arrest or extremis. Each base hospital should develop their own guidelines for access of each of these devices.
- 5. Patients and caregivers may be able to provide valuable information regarding the preexisting vascular device.

GUIDELINES:

- 1. MAY ACCESS devices with externally visible access ports
 - a. Peripherally Inserted Central Catheters (PICC lines) Figure 1
 - b. Tunneling catheters such as Broviac, Hickman, and Groshong Figure 2
 - c. Non-tunneled, dual lumen catheters used for temporary dialysis access, i.e., Quinton catheters
- 2. Devices with no visible external access ports that will require puncture of the skin may ONLY be accessed in cardiac arrest situations WITH BASE PHYSICIAN order.
 - a. Arteriovenous shunts (synthetic bridges between the arterial and venous circulation located under the skin in the forearm and are commonly used for dialysis) Figures
 - 3 and 4
 - b. Subcutaneous internal access devices that require access through the skin (often found in the upper chest or forearm) for example, Port-a-Cath Figure 5
- 3. Observe strict adherence to aseptic technique when handling any of these devices.
- 4. Do not introduce air or allow IV fluids to run dry; these are direct lines into the central circulation.
- 5. Use padded hemostats to clamp the catheter if catheter gets damaged during access.

EFFECTIVE DATE: 4-21-10

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<u>ACCESSIBLE DEVICES</u> – devices with externally visible access ports

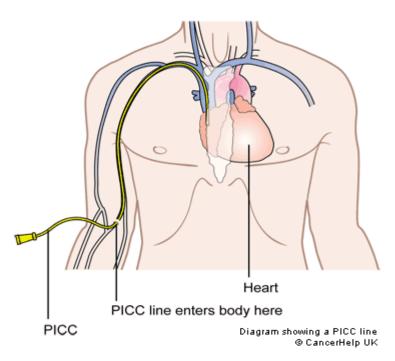


Figure 1: Peripherally Inserted Central Catheter Line (PICC)

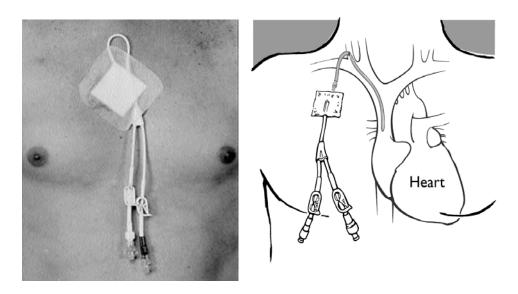
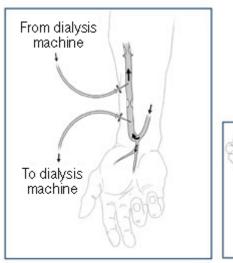
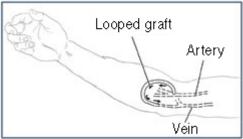


Figure 2: External and internal views: Tunneling Catheter, e.g., Groshong, Hickman, and Broviac.

ACCESSIBLE DEVICES ONLY IN CARDIAC ARREST WITH BASE PHYSICIAN ORDER – devices with no visible external access ports and subcutaneous internal access devices that will require puncture of the skin





Figures 3 and 4: Arteriovenous fistula and arteriovenous graft used for dialysis



Figure 5: Port-a-Cath